You are the CEO of a CreditCard company and have asked a consultancy company to help set up your information systems.

You had provided them with the following requirements text:

Before a credit card can be used, it usually goes through several steps. The first step is to apply for the credit card. Based on the credit limit of the credit card, the application can be approved or rejected. An approved credit card still needs to be physically printed, so it is sent to production. Once printed, it can be activated and used. Payments can be made on the credit card. Each payment must be approved by the customer. If we believe that a payment is fraudulent, we may initiate an investigation of the payment, during which it is temporarily not possible to make new payments. After the investigation is finished, the payment may be marked as OK or fraudulent. The credit card from which the fraudulent payment was made will be blocked. No payments can be made with a blocked credit card. A customer can also request that a credit card be blocked if it has been stolen.

After several months, the consultancy has given you a model for your information system. You now start checking whether it functions correctly.

Examples of what to check:

* Are there any backwards or forwards inaccessible states?
* Are there any nondeterministic states?
* Are there any superfluous (e.g. transitions that can never be used) transitions?